IN THE CLAIMS

The status of the claims as presently amended is as follows:

1-9. (*Canceled*)

10. (*New*) An image reading apparatus comprising:

image reading means for reading an image on an original for each pixel; and

pixel interpolation means for compensating for pixel data corresponding to a target pixel through interpolation with interpolation data,

wherein said pixel interpolation means comprising degree-of-flatness detecting means for detecting the degree of flatness of a plurality of pixel data situated in the vicinity of the target pixel;

filter-size selecting means for selecting a filter size according to a result of detection provided by said degree-of-flatness detecting means; and

interpolation-data computing means for computing the interpolation data by performing a filtering operation on the plurality of pixel data situated in the vicinity of the target pixel according to the filter size selected.

11. (*New*) An image reading apparatus according to claim 10, wherein said image reading means is composed of a plurality of image sensors arranged in a row at predetermined intervals, and the target pixel is a pixel corresponding to a space between adjacent image sensors.

12. (*New*) An image reading apparatus according to claim 10, wherein said interpolation-data computing means includes a plurality of filters having respective different filter sizes.

13. (*New*) An image reading apparatus according to claims 10, wherein said filter size is based on the number of pixels that said interpolation-data computing means makes reference to when computing the interpolation data.

14. (*New*) An image reading apparatus according to claims 10, wherein said degree-of-flatness detecting means detects the degree of flatness of a plurality of pixel data situated on each of both sides of the target pixel.

15. (*New*) An image reading apparatus according to claim 14, wherein said degree-of-flatness detecting means computes a maximum value and a minimum value of the plurality of pixel data situated on each of both sides of the target pixel, and determines that the degree of flatness is high, if a difference between the maximum value and the minimum value is not greater than a predetermined threshold value.

16. (*New*) An image reading apparatus according to claim 14, wherein said degree-of-flatness detecting means detects the degree of flatness of the plurality of pixel data situated on each of both sides of the target pixel.

17. (*New*) A data interpolation method for an image reading apparatus having image reading means for reading an image on an original for each pixel and arranged to compensate for pixel data corresponding to a target pixel through interpolation with interpolation data, said data interpolation method comprising:

detecting the degree of flatness of a plurality of pixel data situated in the vicinity of the target pixel;

selecting a filter size according to a result of detection of the degree of flatness; and

computing the interpolation data by performing a filtering operation on the plurality of pixel data situated in the vicinity of the target pixel according to the filter size selected.